

highly unsaturated fatty acid under conditions comprising:

P2 i) salinity levels less than salinity levels found in seawater; and

P2 ii) a temperature of at least about 15°C;
and

P1 b) food material.

58. (Twice Amended) A food product, produced by the process comprising:

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5 a) [a source of omega-3 highly unsaturated fatty acids selected from the group consisting of microorganisms from the order Thraustochytriales, omega-3 highly unsaturated fatty acids extracted from said microorganisms, and mixtures thereof; and

b) food material,

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wherein said ~~culturing~~ microorganisms selected from the group consisting of microorganisms of the genus Thraustochytrium, microorganisms of the genus Schizochytrium and mixtures thereof [have been cultured] in a medium comprising a sodium concentration less than about 6.58 g/l; and

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b) mixing said microorganisms or omega-3 highly unsaturated fatty acid extracted from said microorganisms with a food material.

10 66. (Once Amended) A food product, as claimed in Claim 1, wherein said microorganisms are selected from the group consisting of:

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5 (i) Schizochytrium having the identifying characteristics of ATCC Accession No. 20888 and mutant strains derived therefrom, wherein, said mutant strains derived therefrom are capable of producing omega-3 highly unsaturated fatty acid;

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(ii) Schizochytrium having the identifying characteristics of ATCC Accession No. 20889 and mutant strains derived therefrom, wherein, said mutant strains derived therefrom are capable of producing omega-3 highly unsaturated fatty acid;

(iii) Thraustochytrium having the identifying characteristics of ATCC Accession No. 20890 and mutant strains derived therefrom, wherein, said mutant strains derived therefrom are capable of producing omega-3 highly unsaturated fatty acid;

(iv) Thraustochytrium having the identifying characteristics of ATCC Accession No. 20891 and mutant strains derived therefrom, wherein, said mutant strains derived therefrom are capable of producing omega-3 highly unsaturated fatty acid; and

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(v) Thraustochytrium having the identifying characteristics of ATCC Accession No. 20892 and mutant strains derived therefrom, wherein, said mutant strains derived therefrom are capable of producing omega-3 highly unsaturated fatty acid.

67. (Once Amended) A food product, as claimed in Claim 58, wherein said microorganisms are selected from the group consisting of:

(i) Schizochytrium having the identifying characteristics of ATCC Accession No. 20888 and mutant strains derived therefrom, wherein, said mutant strains derived therefrom are capable of producing omega-3 highly unsaturated fatty acid;

(ii) Schizochytrium having the identifying characteristics of ATCC Accession No. 20889 and mutant strains derived therefrom, wherein, said mutant strains

derived therefrom are capable of producing omega-3 highly unsaturated fatty acid:

15 (iii) Thraustochytrium having the identifying characteristics of ATCC Accession No. 20890 and mutant strains derived therefrom, wherein, said mutant strains derived therefrom are capable of producing omega-3 highly unsaturated fatty acid:

20 (iv) Thraustochytrium having the identifying characteristics of ATCC Accession No. 20891 and mutant strains derived therefrom, wherein, said mutant strains derived therefrom are capable of producing omega-3 highly unsaturated fatty acid; and

25 (v) Thraustochytrium having the identifying characteristics of ATCC Accession No. 20892 and mutant strains derived therefrom, wherein, said mutant strains derived therefrom are capable of producing omega-3 highly unsaturated fatty acid.

Please add the following new claims 68-72.

68. A food product, as claimed in Claim 1, wherein said microorganisms are capable of effectively producing omega-3 highly unsaturated fatty acid at a temperature of at least about 25°C.

69. A food product, as claimed in Claim 1, wherein said microorganisms are capable of effectively producing omega-3 highly unsaturated fatty acid at a temperature of at least about 30°C.

70. A food product, as claimed in Claim 58, wherein said microorganisms are cultured at a temperature of at least about 25°C.

71. A food product, as claimed in Claim 58, wherein said microorganisms are cultured at a temperature of at least about 30°C.

72. A food product comprising:

a) microorganisms selected from the group consisting of:

(i) Schizochytrium having the identifying characteristics of ATCC Accession No. 20888 and mutant strains derived therefrom, wherein, said mutant strains derived therefrom are capable of producing omega-3 highly unsaturated fatty acid,

(ii) Schizochytrium having the identifying characteristics of ATCC Accession No. 20889 and mutant strains derived therefrom, wherein, said mutant strains derived therefrom are capable of producing omega-3 highly unsaturated fatty acid,

(iii) Thraustochytrium having the identifying characteristics of ATCC Accession No. 20890 and mutant strains derived therefrom, wherein, said mutant strains derived therefrom are capable of producing omega-3 highly unsaturated fatty acid,

(iv) Thraustochytrium having the identifying characteristics of ATCC Accession No. 20891 and mutant strains derived therefrom, wherein, said mutant strains derived therefrom are capable of producing omega-3 highly unsaturated fatty acid, and

(v) Thraustochytrium having the identifying characteristics of ATCC Accession No. 20892 and mutant strains derived therefrom, wherein, said mutant strains derived therefrom are capable of producing omega-3 fatty acid; and

(b) food material.